IN THE CLAIMS

Please amend the claims as follows:

Claims 1-38 (Withdrawn)

Claim 39 (Currently Amended): A method of detecting Type 1 diabetes

~~by detecting the presence of auto-antibodies specifically targeting the beta-cells of the pancreatic islets of Langerhans wherein the auto-antibodies are present in the serum of an individual, the method~~

comprising:

contacting serum from a subject with ZnT-8 polypeptide or an antigenic fragment thereof; and

detecting complex formation between autoantibodies in the serum and ZnT-8 or an antigenic fragment of ZnT-8;

wherein complex formation is indicative of the presence of autoantibodies in the subject's serum and autoantibodies correlate with an increased risk of Type 1 diabetes

~~exposing a protein to the serum of the individual, and~~

~~detecting the presence of any auto-antibodies bound to the protein,~~

~~wherein the protein is at least one protein selected from the group consisting of SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 2, and combinations thereof~~.

Claim 40 (Currently Amended): The method of claim 39, comprising contacting the serum with ZnT-8 polypeptide comprising SEQ ID NO: 2

~~wherein the protein is present on a chip comprising the protein~~.

Claims 41-45 (Cancelled)

Claim 46 (Previously Presented): The method of claim 39, wherein the detecting comprises an immunoenzymatic detecting.

Claim 47 (Previously Presented): The method of claim 39, wherein the detecting comprises an immunochemical detecting.

Claim 48 (Previously Presented): The method of claim 39, wherein the detecting comprises an immunochemical detecting and an immunoenzymatic detecting.

Claim 49 (New): The method of claim 39, wherein complex formation occurs on a chip comprising a ZnT-8 polypeptide or an antigenic fragment thereof.

Claim 50 (New): The method of claim 49, wherein complex formation occurs on a chip comprising a polypeptide comprising SEQ ID NO: 2.

Claim 51 (New): The method of claim 49, wherein complex formation occurs on a chip comprising an antigenic fragment of the polypeptide of SEQ ID NO: 2.

Claim 52 (New): A chip comprising ZnT-8 polypeptide or an antigenic fragment thereof.

Claim 53 (New): The chip of claim 52, comprising the polypeptide of SEQ ID NO: 2.

Claim 54 (New): The chip of claim 52, comprising a fragment of the polypeptide of SEQ ID NO: 2.

Claim 55 (New): A method for detecting ZnT-8 autoantibodies in a subject, comprising:

contacting serum from a subject with ZnT-8 or an antigenic fragment thereof; and

detecting complex formation between autoantibodies in the serum and ZnT-8 or an antigenic fragment of ZnT-8;

wherein complex formation is indicative of the presence of autoantibodies in the subject's serum and autoantibodies correlate with an increased risk of Type 1 diabetes